

## WHAT IS CLAIMED IS:

1. A text composition spacing amount setting device for a desktop publishing (DTP) system, comprising:

at least one inter-character-class spacing amount setting table, for use in line composition, for grouping similar characters, forming a plurality of character classes and setting inter-character spacing amounts between a character class of a previous character and a character class of a next character within a pair of continuous characters;

a display device for displaying electronic text that has been line composed; and an input device for providing user input;

wherein the text composition spacing amount setting device has a basic settings mode for setting the inter-character spacing amount using a character class relationship table defining a relationship between the character class for the previous character and the character class for the next character and a detailed settings mode for setting the inter-character spacing amount directly without using the character class relationship table.

2. The text composition spacing amount setting device of claim 1, wherein the plurality of character classes includes one or more of (1) starting parenthesis, (2) ending parenthesis, (3) characters that cannot appear at the start of a line, (4) non-centered punctuation, (5) centered punctuation, (6) period, (7) comma, (8) repeating characters that cannot be broken across lines, (9) preceding abbreviation code, (10) following abbreviation code, (11) full-width ideographic spaces, (12) hiragana, (13) Japanese characters other than character classes (1) through (12), (14) full-width numeral, (15) half-width numeral, (16) half-width Roman text, (17) start of line, (18) start of paragraph, and (19) end of line.

3. The text composition spacing amount setting device of claim 1, wherein the character class relationship table associates the same spacing amount between the previous character and the next character in two adjacent character sets, each character set including a previous character and a next character.

4. The text composition spacing amount setting device of claim 2, wherein the character class relationship table provides the same spacing amount if the character class for either the

previous character or the next character is non-punctuation (that is, any of character classes (3), (4), (8), (9), (10), (12), (13), (14), (15), or (16)) or if the character class for either the previous character or the next character is (5) centered punctuation.

5. The text composition spacing amount setting device of claim 4, wherein the spacing amount can be set by a user input in the basic settings mode if the character class for the previous character and the character class for the next character have any of the following relationships:

- 1) Non-punctuation -> Starting parenthesis,
- 2) Ending parenthesis -> Non-punctuation,
- 3) Ending parenthesis -> Starting parenthesis,
- 4) Period -> Starting parenthesis,
- 5) Period -> Non-punctuation,
- 6) Comma -> Starting parenthesis,
- 7) Comma -> Non-punctuation,
- 8) Centered punctuation -> <- Centered punctuation,
- 9) Half-width Roman text -> <- Non-punctuation,
- 10) Start of paragraph -> Starting parenthesis,
- 11) Start of paragraph -> Non-punctuation,
- 12) Start of line -> Starting parenthesis,
- 13) Ending parenthesis -> End of line,
- 14) Period -> End of line,
- 15) Comma -> End of line,
- 16) Centered punctuation -> End of line.

6. The text composition spacing amount setting device of claim 5, wherein the user settable spacing amount for items 1) through 16) are displayed in a dialog box on the display device, and wherein the text composition spacing amount setting device further is operable to receive a user input setting an optimum value, a minimum value, and a maximum value for the spacing amount for each item 1) through 16).

7. The text composition spacing amount setting device of claim 1 , wherein a spacing amount setting file is provided in which file a file name can be attached to an inter-character-class spacing amount setting table having spacing amounts set by a user and saved, the inter-character-class spacing amount setting table saved in the file being accessible and modifiable by a user in either the basic settings mode or in the detailed settings mode.

8. A computer program product, tangibly stored on a computer-readable medium, for setting at text composition spacing amount in a desktop publishing (DTP) system, comprising instructions operable to cause a programmable processor to:

display on a display device a spacing amount saved in an inter-class character table in response to a user selection in the inter-character class spacing amount setting table, for use in line composition, the inter-character class spacing amount setting table grouping similar characters, forming a plurality of character classes and defining inter-character spacing amounts between a character class of a previous character and a character class of a next character within a pair of continuous characters; and

display on a display device the spacing amount saved in the inter-character class spacing amount setting table in a mode selected by a user input, the mode being selected from: a basic settings mode setting the inter-character class spacing amount using a character class relationship table defining a relationship between the character class for the previous character and the character class for the next character for the selected inter-character-class spacing amount setting table, and a detailed settings mode for setting the spacing amount directly without using the character class relationship table.

9. The computer program product of claim 8, wherein the plurality of character classes includes one or more of: (1) starting parenthesis, (2) ending parenthesis, (3) Japanese characters that cannot appear at the start of a line, (4) non-centered punctuation, (5) centered punctuation, (6) period, (7) comma, (8) repeating characters that cannot be broken across lines, (9) preceding abbreviation code, (10) following abbreviation code, (11) full-width ideographic spaces, (12) hiragana, (13) Japanese characters other than character classes (1) through (12), (14) full-width numeral, (15) half-width numeral, (16) half-width Roman text, (17) start of line, (18) start of paragraph, and (19) end of line.

10. The computer program product of claim 9, wherein the character class relationship table associates the same spacing amount between the previous character and the next character in two adjacent character sets, each character set including a previous character and a next character.

11. The computer program product of claim 10, wherein the character class relationship table provides the same spacing amount if the character class for either the previous character or the next character is non-punctuation (that is, any of character classes (3), (4), (8), (9), (10), (12), (13), (14), (15), (16)) or if the character type of either the previous character or the next character is (5) centered punctuation.

12. The computer program product of claim 11, wherein the spacing amount can be set by a user input in the basic settings mode if the character class for the previous character and the character class for the next character have any of the following relationships:

- 1) Non-punctuation -> Starting parenthesis,
- 2) Ending parenthesis -> Non-punctuation,
- 3) Ending parenthesis -> Starting parenthesis,
- 4) Period -> Starting parenthesis,
- 5) Period -> Non-punctuation,
- 6) Comma -> Starting parenthesis,
- 7) Comma -> Non-punctuation,
- 8) Centered punctuation -> <- Centered punctuation,
- 9) Half-width Roman text -> <- Non-punctuation,
- 10) Start of paragraph -> Starting parenthesis,
- 11) Start of paragraph -> Non-punctuation,
- 12) Start of line -> Starting parenthesis,
- 13) Ending parenthesis -> End of line,
- 14) Period -> End of line,
- 15) Comma -> End of line,
- 16) Centered punctuation -> End of line.

13. The computer program product of claim 12, further comprising instructions operable to cause a programmable processor to:

display the user settable spacing amount for items 1) through 16) in a dialog box on the display device; and

receive a user input setting an optimum value, a minimum value and a maximum value for the spacing amount for each item 1) through 16).

14. The computer program product of claim 8, wherein a spacing amount setting file is provided in which file a file name can be attached to an inter-character class spacing amount setting table having spacing amounts set by a user and saved, the inter-character class spacing amount setting table saved in the file being accessible and modifiable by a user in either the basic settings mode or in the detailed settings mode.

15. A text composition spacing amount setting device for a DTP system, comprising:  
at least one inter-character-class spacing amount setting table, for use in line composition, that the at least one inter-character-class spacing amount setting table grouping similar characters, forming a plurality of character classes and setting inter-character spacing amounts between a character class of a previous character and a character class of a next character within a pair of continuous characters;

a display means capable of displaying electronic text that has been line composed; and

an input means with which a user can perform input;

wherein the spacing amount setting means is operable to start in response to user input and has a basic settings mode that sets the spacing amount using a character class relationship table that defines the relationship between the character class of the previous character and the character class of the next character, and a detailed settings mode that sets the spacing amount directly without using the character class relationship table.

16. A computer readable recording medium recording a text composition spacing amount setting program for executing by computer in a desktop publishing system, comprising:

a procedure for displaying on a display means a spacing amount saved in an inter-character-class spacing amount setting table when a user selects the inter-character-class spacing amount setting table, for use in line composition, that the inter-character-class spacing amount setting table grouping similar characters, forming a plurality of character classes and setting inter-character spacing amounts between a character class of a previous character and a character class of a next character within a pair of continuous characters; and

a procedure for displaying on a display means the spacing amount saved in the inter-character-class spacing amount setting table in a mode selected by the user from: a basic settings mode that sets the spacing amount using a character class relationship table that defines the relationship between the character class of the previous character and the character class of the next character for said selected inter-character-class spacing amount setting table, and a detailed settings mode that sets the spacing amount directly without using the character class relationship table.